Dr. Siddhartha Sarkar
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My dear Sarkar,

I was very much excited to get your letter of May 7th; there was some delay because I have been out of town. Your finding of an immunological cross-reaction between sperm and group C Salmonella is very exciting and I am sure you have anticipated all of the important implications of this that come to my mind. You probably know the literature better than I do, but I am enclosing a few scraps of background material that I was able to dig up quickly.

Now I will try to help you with respect to your specific questions the best way I can.

Paratyphi C is rather a rare infection in man, at least in the United States, and you may have some trouble locating convalescent sera. However, it may also be worthwhile looking at other examples of food poisoning with group C Salmonella. I am enclosing two notes that may give you the best leads of people to ask about the possibilities. Salmonella Montevideo is one particularly common group C example although generally the B and D groups are much more common. I do not know whether food poisoning is accompanied by significant serological reactions.

You should be able to do a great deal already with your rabbit sera by cross-absorption methods to demonstrate the identity of the common factors. You should be able to get all the necessary strains, if you do not have them already, from Dr. Brechman. It also occurs to me that it would be an interesting demonstration to demonstrate mixed agglutination between these bacterial types and the sperm. In fact, O agglutination can usually be done without interfering with the motility of the bacteria, so you could get some very persuasive looking complexes in this way.

With respect to autoimmune sera, your best sources should bee Behrman at the Department of OB/GYN at Ann Arbor, Michigan; Dave Mumford, the same department at Baylor, Houston, Texas; and Sidney Shulman, Department of Microbiology, New York Medical College, New York 10029. I think you should tell them that you have gotten cross-reactions with certain bacteria, but if you give them more details you may put them into an unavoidable temptation to repeat your finding even before you have had a chance to verify it yourself.

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I will be most interested to hear your further findings, especially with regard to the hapten-inhibition activity of mannose derivatives.

All best wishes.

Sincerely yours,

Joshua Lederberg Professor of Genetics

JL/rr Enclosures